

Temporary Traffic Control Guidance for Short-Term Crack Sealing Operations on Conventional Roads

The purpose for this document is to assist designers, contractors, and field inspectors in providing uniform guidance for the development and implementation of site-specific traffic control plans for short-term crack sealing operations on conventional roadways for State construction projects. Where short-term is defined as daytime work that occupies a location for more than one hour within a single daylight period.



Appropriate temporary traffic control measures should be in place for crack treatment construction areas to protect workers and the traveling public before any work activity begins. The temporary traffic control for crack sealing may be either a moving operation, as encountered on conventional roadways or a stationary work zone as encountered on expressways/ freeways or multilane highways lane closures. This traffic control not only provides for minimal disruptions for the motoring public but is necessary to provide a safe working environment for crews installing the sealant. It should be noted that workers must always remain within the traffic control area during crack sealing operations.

All temporary traffic control plans shall be designed in accordance with Part 6 Traffic Control of the current edition of the Manual on Uniform Traffic Control Devices (MUTCD) and its latest revisions or per State Standards and Specifications noted in the project plans.

On highways and streets, crack treatments are generally performed as a moving operation occupying a single lane at a time. Traffic control devices are moved as the construction work zone proceeds along the pavement. The lane closure distance after sealant has been applied must have sufficient time and distance for the product to cure and be ready to bear traffic. Often crack sealants are treated with a specific product that provide the ability for traffic to immediately travel over the applied area.

Workers should be appropriately trained to operate equipment properly and safely that they will be using. Training should also include recognizing and preventing potential safety hazards present for crack sealing operations including exposure to traffic, exposure to elevated material temperatures and proximity to powered equipment. Identifying the hazards and taking proper measures to mitigate these risks is paramount. Every person working on the crack sealing crew is responsible not only for their own, but for other's safety, as well.

Temporary Traffic Control Considerations (include but are not limited to the following):

- Signs and devices match the traffic control plan.
- The set-up complies with the local agency or Federal Manual on Uniform Traffic Control Devices
- Flaggers do not hold traffic for too long.
- Any unsafe conditions are reported to a supervisor.
- Traffic is not opened to the sealed pavement until the sealant has adequately cooled or cured to prevent material failure.
- Signs are removed or covered when they are no longer needed.
- All workers, including emergency responders, within the highway right-of-way within the temporary traffic control zone shall wear the appropriate high visibility apparel that meets Class 2 or 3 requirements for the ANSI/ISEA 107-2004 or newer.

Traffic Operations

Work will be contained within two-mile segments of roadway, as per the approved traffic control plan. Within that two-mile section, two one-mile work zones are installed:

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a) First an Active Work Zone

- The active work zone includes the following construction approach sign package - Road Work Head, One Lane Road Ahead, a Flagger Symbol, End Road Work signs which are turned facing approaching traffic with the Flagger Symbol installed between 500 feet in advance of the Flagger station.
- This work zone package will include a 50-100 FT taper that closes the lane of travel for the full 1 mile, with devices placed at a spacing of approximately 20 feet along the taper or 10 ft for a 50 ft taper when closing one lane on a two-lane highway.



b) Next the Inactive Work Zone

- The inactive work zone shall have all the same construction approach signs as the active work zone and installed in the appropriate configuration but facing away from approaching traffic until the work convoy extends beyond the first one-mile segment into the second one-mile segment location. This is accomplished by having traffic control personnel (not the Flaggers) moving and turning the appropriate construction approach signs and devices ahead of the work convoy.
 - At this point the Flaggers would relocate to a position at the beginning of the tapers for the second segment while the cones from the tangent area and taper from first segment would be retrieved and placed into the second segment making it the active work area as the work convoy proceeds into along the highway closing it off from approaching traffic.

General Notes:

1. The diagram shown below indicates signing for crack sealing operation: moving from the bottom of the page to the top of the page.
2. All work vehicles shall display high intensity rotating, flashing, oscillating, strobe lights, in addition to vehicle hazard lights.
3. The use of truck mounted attenuators (TMA) on the protection vehicle are required.
4. Protection vehicles should slow down in advance of vertical or horizontal curves that restrict sight distance. Provide sufficient roll-ahead gaps from the work activity and the attenuator truck.
5. Arrow panels when used shall be displayed in caution mode only.
6. Each vehicle shall have two-way radio communication capability.
7. Vehicle spacing between the work and protection vehicles may vary depending on terrain and other factors.
8. Motorists approaching the work convoy should be able to see the flagger station at least 1000 ft in advance of the location in time to slow down and/or change lanes.
9. Signs placing vehicles shall be positioned as not to obstruct sight distance or corner sight distance other signs or arrow panels.
10. Cone spacing along the centerline shall be a maximum of twice the posted speed limit, in feet.
11. Each operation shall have dedicated traffic control personnel whose responsibility is to set-up and remove signs and traffic control devices as required for the construction operation to proceed along the route.
12. All distances are desirable minimums; field conditions shall control the actual placement.

